1 FW Receipt

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Appln. Serial No.: 10/598,700
Applicant(s): Ray et al.

Docket No.: 88870.007
Filing Date: September 8, 2006
Art Unit: 1635

Title: SMALL SYNTHETIC RNA, A METHOD OF PREPARING THE SAME AND USES THEREOF

REQUEST FOR CORRECTION TO OFFICIAL FILING RECEIPT

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

To the Commissioner:

Applicant received the Official Filing Receipt directed to the above-referenced patent application. The Filing Receipt has an error. Under "Domestic Priority data as claimed by applicant," the filing date of 03/10/2005 is incorrect. The correct filing date is 03/11/2005. A copy of the Filing Receipt is attached and includes the appropriate change. Also attached is the front page of the published international application with the international filing date of 03/11/2005 highlighted. Applicant requests a corrected Filing Receipt.

Should the Commissioner have any questions or comments, please contact the undersigned attorney.

Respectfully submitted,

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I hereby certify that this correspondence is being deposited with the U.S. Postal Service as first class mail in an envelope addressed to:

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Date of Deposit: October 22, 2007

Signature: Mary S. Hanson

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APPL NO.	FILING OR 371(c) DATE	ART UNIT	FIL FEE REC'D	ATTY.DOCKET NO	TOT CLMS	IND CLMS
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CONFIRMATION NO. 9107

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FILING RECEIPT

OC000000026227426

Date Mailed: 10/11/2007

Receipt is acknowledged of this nonprovisional patent application. The application will be taken up for examination in due course. Applicant will be notified as to the results of the examination. Any correspondence concerning the application must include the following identification information: the U.S. APPLICATION NUMBER, FILING DATE, NAME OF APPLICANT, and TITLE OF INVENTION. Fees transmitted by check or draft are subject to collection. Please verify the accuracy of the data presented on this receipt. **If an error is noted on this Filing Receipt, please write to the Office of Initial Patent Examination's Filing Receipt Corrections. Please provide a copy of this Filing Receipt with the changes noted thereon. If you received a "Notice to File Missing Parts" for this application, please submit any corrections to this Filing Receipt with your reply to the Notice. When the USPTO processes the reply to the Notice, the USPTO will generate another Filing Receipt incorporating the requested corrections (if appropriate).**

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Power of Attorney: The patent practitioners associated with Customer Number **25005**.

Domestic Priority data as claimed by applicant 03/11/2005

This application is a 371 of PCT/IN05/00078 ~~03/10/2005~~

Foreign Applications

INDIA 224/CHE/2004 03/12/2004

If Required, Foreign Filing License Granted: 10/10/2007

The country code and number of your priority application, to be used for filing abroad under the Paris Convention, is US10/598,700

Projected Publication Date: 01/17/2008

Non-Publication Request: No

Early Publication Request: No

Title

Small Synthetic Rna, a Method of Preparing the Same and Uses Thereof

Preliminary Class

514

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(81) Designated States *(unless otherwise indicated, for every kind of national protection available)*: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

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Declarations under Rule 4.17:

— *as to the identity of the inventor (Rule 4.17(i)) for the following designations AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW, ARIPO patent (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG)*

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— *as to the applicant's entitlement to claim the priority of the earlier application (Rule 4.17(iii)) for all designations*

[Continued on next page]

(54) Title: A SMALL SYNTHETIC RNA, A METHOD OF PREPARING THE SAME AND USES THEREOF

(57) Abstract: Translation of the hepatitis C virus (HCV) RNA is mediated by the interaction of ribosomes and cellular proteins with an internal ribosome entry site (IRES) located within the 5'untranslated region (5'UTR). We have investigated whether small RNA molecules corresponding to the different stem-loop (SL) domains of the HCV IRES, when introduced in trans, can bind to the cellular proteins and antagonize their binding to the viral IRES, thereby inhibiting HCV IRES-mediated translation. We have found that an RNA molecule corresponding to SL III of the HCV IRES could efficiently inhibit HCV IRES-mediated translation in a dose-dependent manner without affecting cap-dependent translation. The SL III RNA was also found to bind efficiently to most of the cellular proteins which interacted with the HCV 5'UTR. A smaller RNA corresponding to SL e+f of domain III also strongly and selectively inhibited HCV IRES-mediated translation. This RNA molecule showed strong interaction with the ribosomal S5 protein and prevented the recruitment of the 40S ribosomal subunit by the HCV IRES. In conclusion our results demonstrate a novel approach to selectively block HCV RNA translation using a small RNA molecules mimicking the structure of the stem-loop IIIe+f subdomain of the HCV-IRES. The discovery provides a basis for developing a potent antiviral therapy targeting the interaction between the ribosome and the HCV-IRES RNA.

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